Hyper SuperServer SYS-620H-TN12R

2U Hyper with 12 NVMe/SAS/SATA bays and up to 8 PCIe slots with GPU support

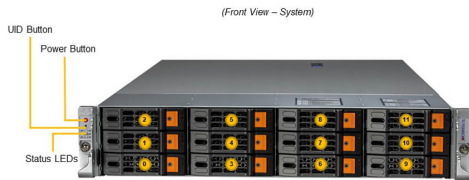More details here

Key Applications

Virtualization, Software-defined Storage, AI Inference and Machine Learning,
Cloud Computing, Enterprise Server,

Key Features

- Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors;
- 32 DIMM Slots; Up to 8TB DRAM; Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM); 3200/2933/2666 ECC DDR4 LRDIMM;RDIMM; Intel® Optane™ Persistent Memory 200 series;
- Optional PCIe slot configurations up to 8 PCIe 4.0 x8 or 4 PCIe 4.0 x16 slots with support for double-width GPU/Accelerator cards;
- Flexible networking options with up to 2 AIOM networking slots (OCP NIC 3.0 compatible);
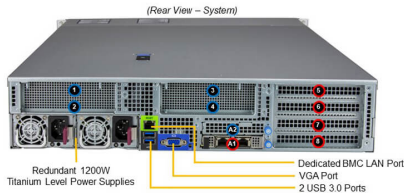- 4 heavy duty hot-swap fans with optimal fan speed control;

Form Factor	2U Rackmount Enclosure: 437 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 263 x 1107mm (23.8" x 10.4" x 43.6")
Processor	Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 40C/80T; Up to 60MB Cache per CPU
GPU	Up to 4 double-width GPUs
System Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 Supports Intel® Optane™ persistent memory 200 series
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 3.5" NVMe*/SAS*/SATA* drive bays (*NVMe/SAS/SATA support may require additional storage controller and/or cables) M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)

Expansion Slots	Default*
	  • 8 PCIe 4.0 x8 (in x16) FH/10.5"L slots
	  • 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)
	Option A*
	  • 2 PCIe 4.0 x8 (in x16) FH/10.5"L slots
	  • 3 PCIe 4.0 x16 FH/10.5"L slots
	  • 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)
	(*Requires additional parts, please see the optional parts list for details. For more details on PCIe slot configuration options, please refer to the system callout images above.)

On-Board Devices	SATA: SATA (6Gbps) ; RAID 0/1/5/10 support
	NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)
	Chipset: Intel® C621A
	Network Connectivity: 2 RJ45 1GbE with Intel® I350-AM2 (optional)
	        4 RJ45 1GbE with Intel® I350-AM4 (optional)
	        4 SFP 1GbE with Intel® I350-AM4 (optional)
	        2 RJ45 10GBASE-T with Intel® X550-AT2 (optional)
	        2 SFP+ 10GbE with Intel® X710-BM2 (optional)
	        4 SFP+ 10GbE with Intel® XL710-BM1 (optional)
	        4 SFP+ 10GbE with Intel® X710-TM4 (optional)
	        2 SFP28 25GbE with Broadcom® BCM57414 (optional)
	        4 SFP28 25GbE (optional)
	        2 QSFP28 100GbE with Broadcom® BCM57508 (optional)

(Front View – System)

UID Button
Power Button
Status LEDs

Slot	Description
0 – 3	3.5" or 2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)*
4 – 11	3.5" or 2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU2)*

*NVMe, SAS3, or SATA3 support requires additional parts in optional parts list

(Rear View – System)

Redundant 1200W
Titanium Level Power Supplies

Dedicated BMC LAN Port
VGA Port
2 USB 3.0 Ports

Slot Description

	Option 1*	Option 2*	Option 3*
1	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x16	2x Hot-Swap 2.5" NVMe Drive Bays (CPU 1)
2	PCI-E 4.0 x8 (in x16)	—	

Slot Description

	Option 1*	Option 2*	Option 3*
3	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x16	2x Hot-Swap 2.5" NVMe Drive Bays (CPU 2)
4	PCI-E 4.0 x8 (in x16)	—	

Slot Description

	Default	Option 1	Option 2*
5	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x16	PCI-E 4.0 x16
6	PCI-E 4.0 x8 (in x16)	—	—
7	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x16
8	PCI-E 4.0 x8 (in x16)	PCI-E 4.0 x8 (in x16)	—

Slot Description

A1	AIOM / OCP NIC 3.0 Slot
A2	(Optional) AIOM / OCP NIC 3.0 Slot*

CPU1 ■ CPU2 ■

*Requires additional parts in optional parts list

System Cooling	Fans: 4x 8cm heavy duty fans with optimal fan speed control Air Shroud: 2 Air Shrouds
Power Supply	2x 1200W Redundant Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 256MB SPI Flash
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!

PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	FAN: Fans with tachometer monitoring
	    Status monitor for speed control
	    Pulse Width Modulated (PWM) fan connectors
	Temperature: Monitoring for CPU and chassis environment
	    Thermal Control for fan connectors

Dimensions and Weight	Weight: Gross Weight: 63 lbs (28.6 kg) Net Weight: 37 lbs (16.8 kg) Available Color: N/A
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	**Super X12DHM-6**
Chassis	**CSE-HS829-R1K24P**